

ART. VI.—*A few notes on two kinds of Australian Leeches.*
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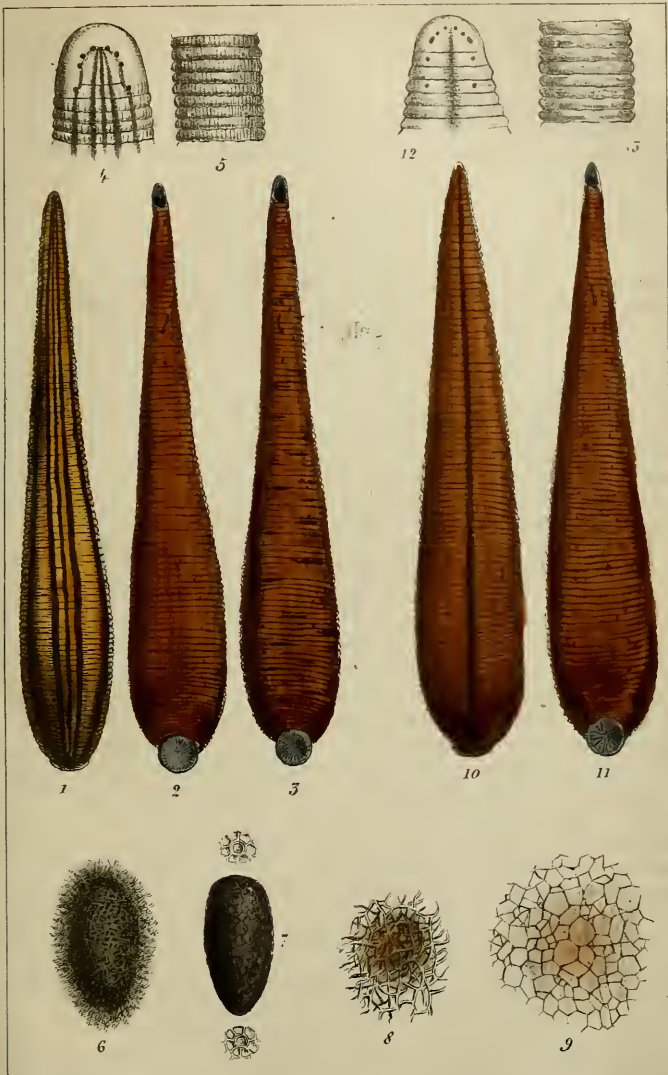
[With a Plate.*]

[Read before the Institute, 28th July, 1858.]

WHILE I was engaged in drawing Australian Leeches of two kinds, for the illustration of Mr. J. Bosisto's descriptive paper, I made a few observations which I think, will be found not quite valueless for distinguishing the true Australian medicinal leech from others.

Fig. 1 represents the back of the *hirudo medicinalis* of Australia; three black lines are running longitudinally over the middle part of the back, and one black line along each side. The ground-color of the upper half of the body is a yellowish brown, while the under side (Fig. 2) is of a deeper, more rusty, hue. On some specimens, small black lines are seen across the belly, as in Fig. 3; but these are accidental and do not indicate a different species. The body of the true Australian medicinal leech is divided into 97 rings, and each ring is again very regularly divided by transverse folds (vide Fig. 5, showing part of the under side magnified). It is provided with four pairs of eyes, placed near the end of the head, as seen in Fig. 4 (magnified). The skin upon the inferior surface of the body has eighteen pairs of pores, exuding a mucous secretion; four rings are between each pair of these pores (Fig. 5). The cocoon (Fig. 7, nat. size) is covered with a sponge-like tissue, of an olive-green color (Fig. 6, nat. size). Part of this tissue is magnified in Fig. 8. The cells, or meshes, of this tissue appear to be formed by flattened threads of a skin-like membrane, joined together in such a manner as to produce cells or meshes of different angular forms. That part of the sponge-like tissue which is nearest to the cocoon, has its meshes closed by a layer of skin, serving as the epidermis of the cocoon. Fig. 9 shows part of the epidermis, magnified. The cocoon is filled with a dark brown fluid, which is visible through the semi-transparent inner skin forming the

* Since the completion of this Plate, it appears, after the examination of various specimens, that the following emendation is necessary. Fig. 10, besides the central line of a jet black color, there exists three faint brown parallel lines on either side.—[Ed.]



Ludwig Becker del. & lith.

Hamel & Locher, impr.

Australian Leeches.

